as dark fiber in the loop and interoffice network. 99/ Section 251(c)(3) also gives competitors access to interoffice packet transport and packet switching, as the Commission made clear in its Advanced Services Order. 100/

This should be the case regardless of the physical and electronic elements used by the ILEC to provide a digital signal to the switch. Competitors need to be able to obtain a digital signal in a switch and router ready format for each customer they seek to serve. The local loop is the network element used by the ILEC to provide itself such a signal, and competitors should have access to the same local loop, including electronics and including all its functionalities. To suggest that a loop is merely the medium -- i.e., the copper wire or optical fiber without electronics -- is to provide competitors with only part of a loop - in effect the sub-loop element referred to in other contexts as "dark fiber." 101/

Today many ILECs already provision T-1 service to customers using copper loops that use HDSL electronics to carry the transmission between the customer premises and the Central Office (CO). These local loop functionalities are already available as unbundled network elements under existing interconnection

^{99/} See Local Competition Order at para 440.

¹⁰⁰ Advanced Services Order at paras. 40, 49 (Section 251(c) of the Act applies equally to packet and circuit switching technologies; advanced services are "telephone exchange" or "exchange access" services).

^{101/ &}quot;Dark Fiber' is 'dark' because it is sold without light communications transmission. The customer is expected to put his own electronics and signals on the fiber and make it light." Newton's Telecom Dictionary, 8th Ed. (1994).

agreements and tariffs. To suggest now that the Commission's definition in the Local Competition Order of a local loop as the "transmission facility between a distribution frame, or its equivalent, in the incumbent LEC central office and the network interface device" 102 does not include these electronics would be a step backward in terms of promoting competition. In fact, the HDSL electronics are both connected to the local loop at or between the distribution frame and the network interface device, and they are what make the copper or fiber a transmission facility. Without the electronics, neither the copper nor optical fiber wire can transmit anything. 103/

F. Dark Fiber

The Commission also should order the ILECs to provide access to dark fiber to enable competitors to exercise the option to install their own electronics to create competing local exchange and exchange access services. The Commission already has recognized in the <u>Advanced Services NPRM</u> that competitors have the option to install their own DSLAM in the ILEC central office and to employ their own packet network facilities to provide competing xDSL services. These competitors would be provided access to the copper loop medium to provide their

¹⁰² Local Competition Order at para. 380

^{103/} There are many technical issues involved with establishing a definition of a local loop in a packet switched environment. These technical issues dictate that the Commission adopt the broadest possible definition of the network elements underlying advanced services, including the loop, so that the ILECs cannot use technical issues to stymie its competitors ability to enter and compete in the market for advanced services.

own electronics. Similarly, competitors should be able to add their own electronics to dark fiber to create high-bandwidth loop and transport facilities.

The ILECs have a tremendous resource in dark fiber that they are not using, as the Commission recognized in the <u>Advanced Services NOI</u>, 104/ If the Commission were to make this dark fiber available to competitors, those competitors could accelerate the roll-out of high-bandwidth services, rather than having to wait in every instance for the ILEC to roll out those services first. The ILECs do not want to offer dark fiber and OC-N rate capabilities because by doing this they will cannibalize their more profitable lower-bandwidth services.

Historically, ILECs have had to be forced by CLEC competitors to offer higher bandwidth services to large businesses in urban centers, under the threat of losing major revenues.

Of course, the availability of copper or fiber without electronics does not obviate the requirement that ILECs provide access to loop and transport facilities that are already equipped with electronics. Indeed, when competitors requested access to dark fiber in the Local Competition Order, the Commission assumed that ILEC transport facilities included the electronics as a matter of course. The issue of access to dark fiber was different, in the Commission's view. The Commission left open the question of network element access in the Local Competition Order because the record was not sufficient to make a decision on it.

^{104/} The ILECs' spare or dark fiber is well over 60 percent of their total fiber deployment. Advanced Services NOI at para. 23 n.19.

In Qwest's view, Section 251(c)(3) itself requires ILECs to provide access to dark fiber in the loop and interoffice plant. The Commission should make that clear in rules it issues as an outcome of this proceeding

G. Unbundling Loops Passing Through Remote Terminals

The existence and increasing deployment of digital loop carrier (DLC) in the outside plant by ILECs calls into question the Commission's underlying assumption in this proceeding that competitors can easily compete with ILECs in the provision of advanced services simply by deploying their own DSLAMs in every central office. As discussed above, the economics of providing advanced services through collocation of DSLAMs dictates that the ILECs will not face serious, broadbased competition for the provision of advanced services. The DLC problem makes it virtually impossible. Thus, the Commission must, at a minimum, ensure that any advanced services loop provided by the ILEC through DLC technology in remote terminals or customer premises locations is available to competitors as an unbundled element, including all electronics.

The ILEC also cannot be permitted to force competitors to pick up the copper wire pulled off some inefficient reverse DLC in the central office. Rather, the ILECs must be required to give competitors high speed access in the central office to the lines served by the remote DLC. xDSL technology is dependent upon short copper loop lengths. The ability to provide increasing speeds and higher bandwidths also means shorter loop lengths, which translates into electronics in the outside plant. It should go without saying that if a competitor is restricted in

serving only those customers not on a DLC, it will be seriously disadvantaged in competing for the customer. It should also go without saying that, as the Commission proposes, any loops provided to a separate affiliate should be provided to competitors. 105

X. THE COMMISSION LACKS AUTHORITY TO FORBEAR UNDER SECTION 10 ON A "SERVICE BY SERVICE" BASIS.

The Commission asked parties to comment on the suggestion of NTIA that the agency explore whether it has authority to forbear from applying Section 251(c) requirements on a "service-by service" basis. 106/ The plain language of Section 10 of the Act, 47 U.S.C. § 160. prohibits the Commission from forbearing from applying any provision of Sections 251 or 271 until those sections are "fully implemented." The FCC therefore lacks authority to forbear from one provision of Section 251, or from the application of that Section to a particular service or facility, until the entire Section is fully implemented. Any other reading would violate Congressional intent, open a huge loophole in the Act, and remove whatever minimal incentive the ILECs now have to open up their markets to competition.

¹⁰⁵ NPRM at para. 168.

^{106/} NPRM at para. 183.

XI. THE COMMISSION ALSO SHOULD BE CONSIDERING BUILD-OUT MANDATES FOR ILEC BROADBAND DEPLOYMENT.

A. ILECs Are and Will Remain the Barrier to Advanced Services For Consumers.

The NPRM proposals rest on an assumption that new incentives are needed to encourage ILECs to deploy advanced communications capability to customer premises. But Qwest also believes the Commission should consider rules that would require ILECs to deploy broadband in the local network -- broadband that would be subject to the pro-competitive requirements of Section 251. 107/ Such mandates may be particularly appropriate for the RBOCs and other larger ILECs.

Qwest arrives at this conclusion out of a severe sense of frustration. We have built a nationwide broadband network that stands ready to unleash the power of the Internet in its fullest form. Our network has enormous capacity to tie business, education, and individual premises together and quickly revolutionize the way Americans communicate with one another. We have both large corporations and small entrepreneurs knocking on our door every day with new ideas for the use of our network's capability.

Then we hit the problem of the last mile, and customer requirements crash on the rocks. The nation's ILECs are simply not responding to demands for last mile broadband in anything approaching a reasonable speed. They are failing to do their job of evolving to a packet-switched, always on local network to meet

^{107/} That is, ILECs would have to make the facilities available under Section 251(c) so that other carriers could use them to offer competing services.

corresponding changes at the interexchange level, and in the Information Economy at large.

There are multiple reasons for this. ILECs are by nature bureaucratic and less innovative. Moreover, they have clear incentives to slow-roll high-bandwidth local loop capabilities offered on a wholesale basis because these facilities cannibalize their existing higher margin retail offerings. The RBOCs also give signs that they do not want to support broadband in the local loop until and unless they are granted interLATA authority and broad deregulation. Qwest appreciates the Commission's decision here to reject such RBOC pleas. 108/ But this still leaves the problem of bringing last mile networks into the packet-switched Internet age as fast as possible.

Obviously one part of the solution is to introduce real competition into the local network. But the experience of the past $2\frac{1}{2}$ years demonstrates that ILECs have an almost infinite ability to delay local competition in a conventional circuit-switched world. Qwest can be excused for fearing that the problems will be even more complicated as we transition to a packet-switched network.

Qwest has already explained why the Commission's separate subsidiary proposal for ILECs violates the Telecommunications Act. The proposal would simply allow an ILEC to move all new local network investment into an affiliate without reducing the ILEC's market power arising from its dominant

^{108/} Advanced Services Order at paras. 11-12.

position in the last mile. Qwest has suggested an alternative plan that might better align incentives to support competition in advanced services. We also support the Commission's proposals for new rules to increase opportunities for CLECs to deploy their own broadband local networks. However, those comments come with the caution that much remains unclear as to where the most serious difficulties lie in a packet environment. All we know for sure is that the ILECs will find them and exploit them.

The NPRM also fails to recognize that ILECs still are likely to slow-roll broadband deployment even under the separate subsidiary structure. ILECs remain reluctant to cannibalize their current services. They still will be ponderous, inefficient and less likely to innovate. And they still will have an incentive to make life as difficult as possible for any CLEC that wants to leap frog them. In a nutshell, the typical ILEC's attitude will be "I'll deploy local broadband when I'm good and ready. Until then I don't want anyone else doing so." Deployment is likely to proceed a relative tortoise pace. Under this scenario Americans generally will see local broadband only when and where the Commission is able to enforce its pro-competitive rules to overcome ILEC recalcitrance. ILECs may then deploy as a competitive response to any opportunities the Commission creates for CLECs in a particular location. But the rest of the country will keep waiting.

B. Reasonable Build-Out Mandates Can Help Unlock the Potential of the Internet.

Americans simply cannot be left to the mercy of the slow-rolling ILECs, and the eventual promise of case-by-case enforcement proceedings. Much more must be done to affirmatively require ILECs to upgrade their local facilities to link customers to the broadband packet networks already here today.

Build-out mandates are particularly appropriate for the RBOCs.

Today the RBOCs are trying to hold the nation hostage. They are arguing that they will build broadband local networks, but only if they first are given three "Super-Carrots": (1) exclusivity so that competitors cannot use those facilities; (2) deregulation so they can charge consumers (including ISP competitors) whatever they want or even deny service altogether; and (3) interLATA relief. 109/

The Commission should not cave in to these demands. Instead, it should recognize a market failure and act accordingly. The Commission should adopt rules requiring the ILECs to do what they already would be doing in a competitive market: deploy broadband network to customer premises that allows customers to reach any service provider on a non-discriminatory basis.

Qwest recognizes that more work would be needed to develop the specific deployment rules themselves. At first blush we see three major parameters. First, what is the minimum amount of "always on" capacity that should be deployed to a particular premise? Second, how broadly should such capacity be available

^{109/} See n.6, supra.

within a given geographic area? And third, how fast should the ILEC be able to turn up the minimum capacity when requested to do so by a customer?

Owest is biased toward rules that would upgrade the local network quickly. But that said, the Commission might choose to adopt more modest baseline goals and requirements now, and reserve the question of whether those baselines should be increased or revised pending further experience. For example, it certainly would be reasonable to require that the RBOCs upgrade their local networks sufficiently so that 20% of their lines have a minimum of 1.5 Mbps capability 110/ within two years and 40% within four years. 111/ These achievable percentages should also include percentages for deployment of technology that would achieve a higher. 5 Mbps capability. 112/ The RBOC would be deemed to meet this "home/business/schools-passed" rule for every line that could be activated for broadband service within a defined short period, a week or less. It goes without saying that the line would have to be capable of allowing the end user to select and access any service provider on the same terms as the ILEC or its affiliate and that the network capability would be available on a network element basis under Section 251(c).

^{110/} This minimum could differ based on the type of premise.

^{111/} In fact, we think that market demand would justify an RBOC meeting an even higher goal, to upgrade so that 70% of its lines would be 1.5 Mbps or higher within two years, and 90% within three years

^{112/} While we believe it would be possible to see 40% of the RBOC's lines so equipped within two years and 60% within three years, the Commission could adopt lower goals, such as 10% and 20%, respectively, which are certainly achievable.

The Commission should also require ILECs to respond to requests for higher bandwidth facilities (e.g. OC-N. DS-3, and dark fiber) from CLECs, end users, and within reasonable time frames. Specific customer demand for access to broadband capabilities should be satisfied as quickly as possible, so that the last mile does not hold back the specific needs of service providers -- who are waiting to develop and market high-bandwidth applications -- and end users -- who waiting to employ high-bandwidth-based services to maximize efficiency and productivity of their businesses. 113/ Unfortunately, an ILEC has strong incentives to delay filling these specific demands, or to fill them with less-than-optimal bandwidth, in order to give the ILEC itself time to market and win a customer. 114/ Requiring responsiveness to specific levels of customer demand also would help address Commission concerns that ILECs might provide advanced services first to more affluent customers and those in more densely populated areas. Finally, the Commission also should order ILECs to provide CLECs with access to dark fiber, which would enable CLECs to deploy their own advanced capabilities, sometimes more quickly than the ILECs themselves can do.

^{113/} For smaller customers, who can be served by copper-based technologies, evidence of customer demand can be aggregated -- e.g., if 3 percent of access lines in a geographic area have requested deployment of xDSL, the ILEC must deploy the capability in that area within 9 months.

^{114/} For a BOC, the incentives might be even stronger -- to delay service rollout by competitors until the BOC is approved to provide interLATA services.

In the future, the Commission can consider whether additional mandates may be necessary, and if so what they should be. We recognize that density and other considerations may become more relevant as the target for "homes/businesses/schools passed" increases. Universal service questions also can be addressed at the next stage. Qwest agrees that in the future minimum broadband access may fall within the definition of interests that Section 254 is designed to protect. As deployment evolves, the Commission has abundant flexibility to make sure that no one is left behind. Right now, however, the most urgent problem is that ILEC recalcitrance is not allowing anyone out of the gate.

Local broadband mandates would promote the goals of Section 706 and be fully consistent with Congressional intent. Section 706 requires the Commission to explore ways to accelerate deployment of capability that "enables users to originate and receive high-quality voice, data, graphics, and video telecommunications." 115/ Section 706 also emphasizes that advanced telecommunications should be deployed in a way that "promot[es] competition," as would be the case if the ILEC upgraded its plant in ways that ensure consumers can reach any service provider, and not just the ILEC or its affiliate. 116/

^{115/ 47} U.S.C. § 706(c)(1). Furthermore, insofar as ILEC market power in the incumbent circuit-switched network is a "barrier to infrastructure investment" by both the ILECs and others, the Commission has a duty to address that obligation.

^{116/ 47} U.S.C. § 706(b).

Furthermore, broadband mandates are consistent with other occasions when the Commission has required deployment of technology to advance consumer choice and the general public interest. For example, one model might come from the cellular experience, where licensees were required to meet specific build out schedules. 117/ Another might be interLATA equal access conversion, where the larger ILECs faced a mandatory conversion and rollout. A third is build-out requirements that most cable companies faced in constructing their systems.

Qwest recommends that the Commission immediately open a rulemaking proceeding to consider ILEC deployment mandates that can go forward side-by-side with the consideration of ILEC deployment incentives here. We emphasize that mandates are in no way a substitute for rules that increase the ability for CLECs to install their own networks. CLEC facilities competition is still crucial to help ensure that ILECs comply with the mandates, and preferably exceed them. Qwest would be pleased if the day came when the local facilities network was so competitive that mandates were no longer needed. However, that day is not foreseeable right now.

Build-out mandates have the potential to unleash the full power of the Internet. They would give Qwest and its customers -- and many other service providers -- the ability to develop new applications for consumers based on the knowledge that they actually will be able to reach at least a minimum number of

^{117/} See 47 C.F.R. § § 22.947, 22.951; 24.103

customers with their products. It may not be an exaggeration to suggest that broadband mandates would be the most important legacy of this Commission to consumers of the next decade.

In its comments, Qwest has responded to the Commission's proposal to encourage ILEC action through separate subsidiaries, as well as the proposals to address CLEC difficulties in deploying broadband themselves. However, we do so with the strong belief that deployment requirements also are needed to unlock the last mile.

CONCLUSION

For the reasons given, the Commission should not permit the ILECs to make advanced services technology investment through an unregulated affiliate. Such action would leave competitors with access to "horse-and-buggy" technology and would ensure that the ILECs will retain their local monopoly as the network evolves. If the Commission does pursue the separate affiliate approach, it must greatly strengthen the separate affiliate requirements that must be in place if an ILEC affiliate is to escape its Section 251(c) market-opening responsibilities for advanced services. The Commission should also create build-out mandates for ILEC deployment of advanced services capability so that American business and consumers can take full advantage of the deployment of broadband networks and the creation of broadband service applications by others.

Respectfully submitted,

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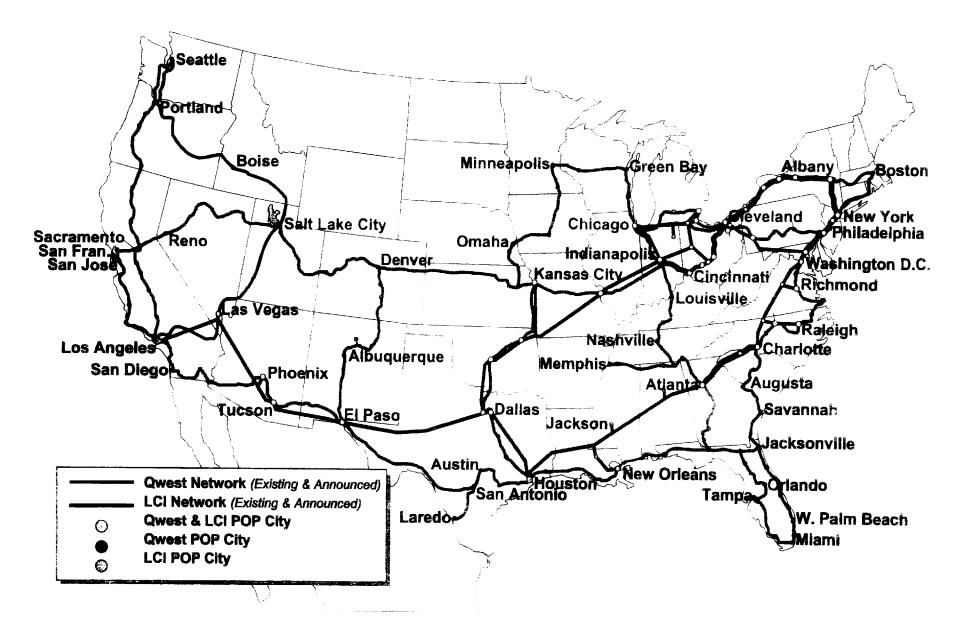
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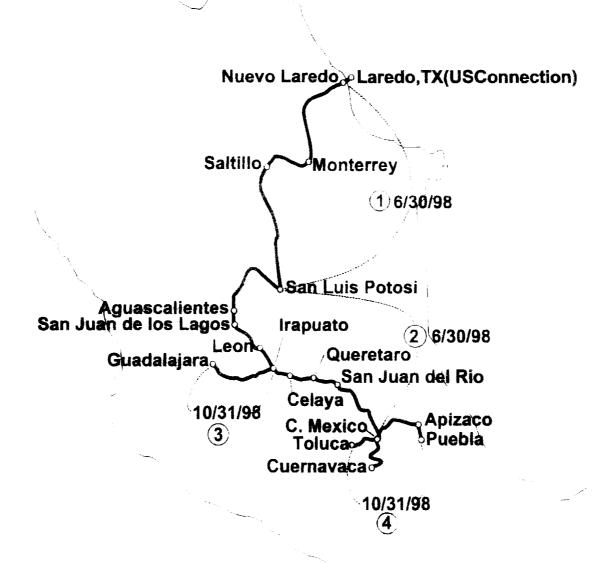
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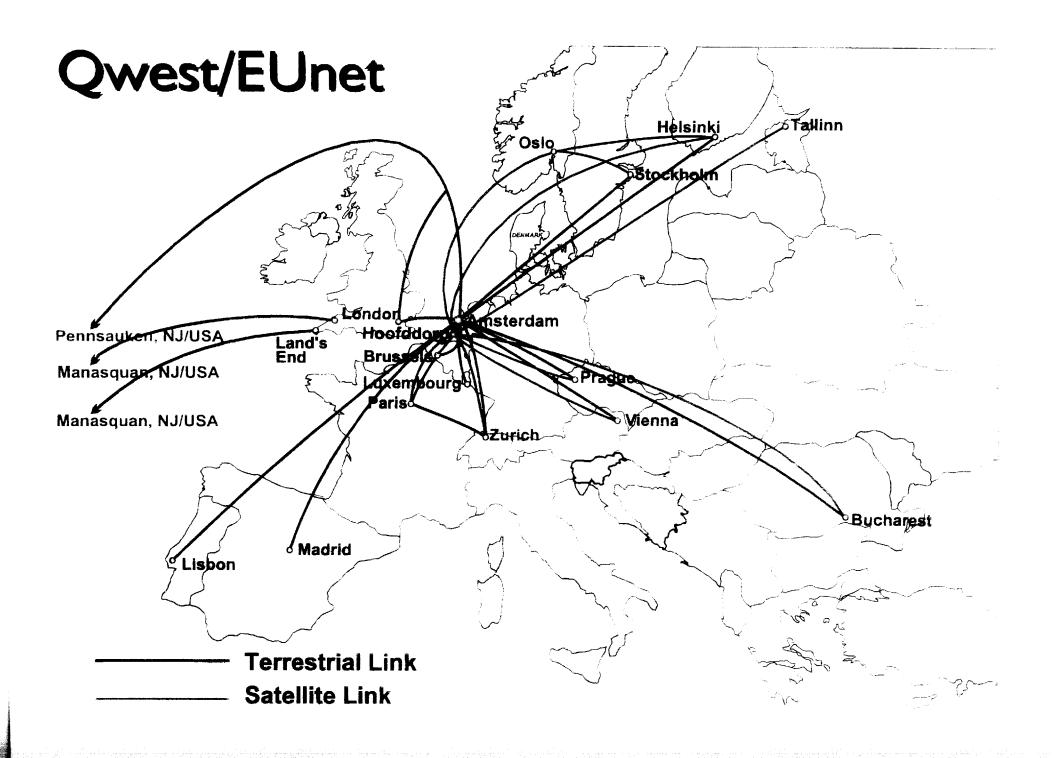
ATTACHMENT A

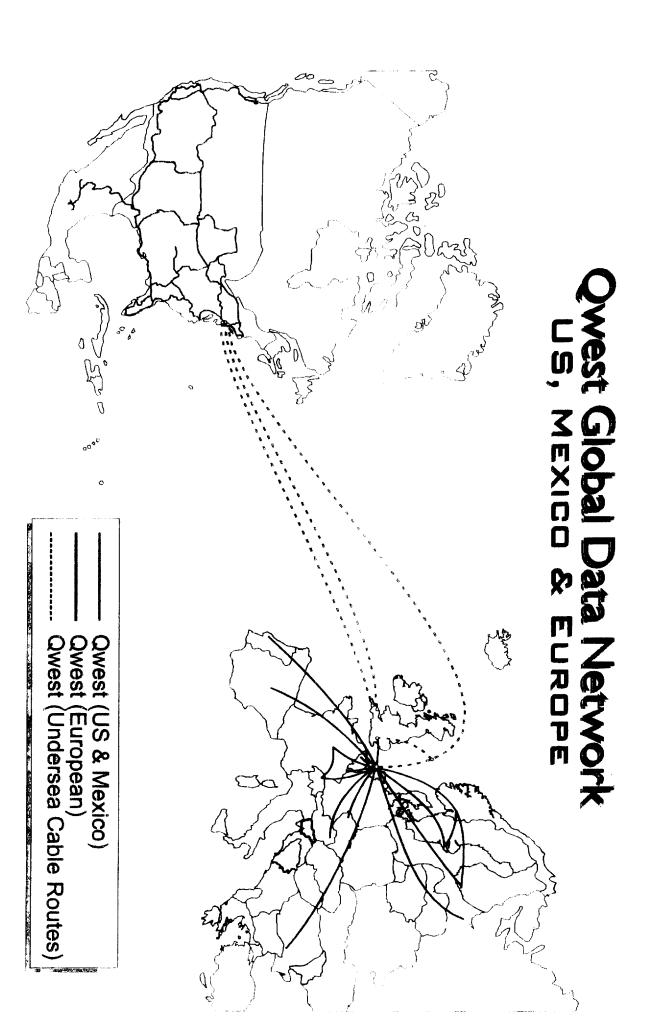
Qwest/LCI Nationwide Network



Qwest Network in Mexico







ATTACHMENT B



NEVIS

FOR IMMEDIATE RELEASE

Contact:

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LCI OFFERS SOLUTION TO CURRENT STALEMATE BLOCKING LOCAL PHONE COMPETITION

Proposal Separates RBOC Wholesale and Retail Operations

MCLEAN, Va, January 22, 1998 – In an effort to jump-start competition in local phone markets, LCI International (NYSE:LCI) today proposed a dramatic plan to break the logiam and bring the benefits of that competition to all consumers, especially residential customers.

In a petition filed today with the Federal Communications Commission (FCC), LCI proposed that the Regional Bell Operating Companies (RBOCs) be allowed 'Fast Track' entry into the long-distance market if they agree to separate their retail operations from the wholesale side of their businesses. LCI will file companion petitions with regulatory agencies in Illinois and New York in the next few days.

LCI's petition states: "An RBOC has two conflicting roles: operator of the local wireline network that all carriers rely upon to provide retail services; and as a competitor in the retail market itself. Thus, whatever incentives an RBOC has to fulfill its statutory obligations to open its network, it has an equally strong, if not far stronger, incentive to prevent retail competitors from capturing local market share."

"In the euphoria following the passage of the Telecommunications Act of 1996, most of us thought that consumers would soon realize the benefits that local phone competition could bring," said H. Brian Thompson, chairman and CEO of LCI International. "Two years later it is clear that the well-crafted, well-intentioned Telecommunications Act has not lived up to its promise. Something must be done to ensure that residential customers are not a forgotten footnote in the telecommunications revolution.

"LCI hereby commits to offer residential customers bundled local and long-distance service in head-to-head competition with any RBOC that steps forward to accept, and implement in good faith, LCI's 'Fast Track' proposal," continued Thompson.

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In its petition, LCI outlined clear steps that would permit the RBOCs to voluntarily choose a 'Fast Track' to enter the long-distance market by separating their retail and wholesale activities. Under LCI's plan, the "inherent conflict of interest" facing the RBOCs would be largely eliminated by the RBOC — referred to in the petition as "HoldCo" — agreeing to separate into two distinct operating units:

- "ServeCo" The RBOC's retail local and long-distance telecommunications service activities would be housed in ServeCo. This company would offer services on the same –substantially unregulated basis as its competitors.
- "NetCo" -- This company would offer use of its local network on a nondiscriminatory basis at forward-looking costs to all carriers who seek to offer local phone service, including the now separate retail side of the RBOC known as ServeCo.

To ensure that ServeCo and NetCo are completely separate operating units, ServeCo would have partial public ownership independent of HoldCo. ServeCo also would have independent directors representing the public shareholders, and independent management compensated entirely based on ServeCo's financial performance.

The petition states: "If adopted, the LCI 'Fast Track' proposal would promote vigorous retail competition by all telecommunications providers, across all telecommunications services for residential as well as business customers in all areas of the country, with the least regulation possible — and would do so quickly."

According to Anne K. Bingaman, president of LCI's local telecommunications division, "LCI is committed to competing in the local market, including extending new local service choices to its residential subscribers. Our goal has been to provide local phone service to both our business and residential customers. Our experience thus far offering local phone service to small and medium-sized businesses has been a challenge at best. Being able to offer local phone service to LCI's residential customers is a long way off in the current environment. If accepted in good faith by the RBOCs, LCI's 'Fast Track' petition will allow LCI to offer all of its residential and small business customers a choice when selecting their local phone carrier."

LCI International, Inc. (NYSE:LCI), the nation's sixth-largest long-distance carrier based upon presubscribed telephone lines as reported by the Federal Communications Commission, provides a full array of worldwide voice and data transmission services to businesses, residential customers and other carriers through its fiber-optic network. The company also currently provides local telephone service to commercial customers

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in 31 U.S. markets. LCI International, Inc. is headquartered in McLean, Va., with offices in more than 60 locations, including national network control and customer service centers, and regional operations in various locations throughout the United States.

To obtain copies of other recent LCI announcements, please contact our fax service at 1-800-758-5804 (id# 520213) or visit LCI International's Web site (http://www.lci.com), which also provides additional corporate information.

Summary of LCI International's Petition

Situation:

Two years after passage of the Telecommunications Act of 1996, its promise of local phone competition has not been realized. In a petition filed January 21, 1998 with the Federal Communications Commission (FCC), LCI International identifies three critical barriers to local phone competition:

- The absence of nondiscriminatory operations support systems (OSS)
- No practical and efficient unbundled network elements (UNE)
- Pricing that discriminates in favor of the RBOC's own retail operations

All of these barriers share a common thread: They are made much more difficult and complex by the conflict of interest between the RBOC's dual role as both network supplier and service provider. In fact, any incentive the RBOC has to sell use of its local facilities to competitors is stunted by the fact that, by doing so, the RBOC's retail operations will lose customers and revenue.

The Solution:

LCI's petition proposes that the FCC adopt an optional 'Fast Track' to competition. Under 'Fast Track,' an RBOC that agrees to a corporate structure to address conflicts of interest that currently exist between its dual role as both the network supplier and service provider. The RBOC would, in turn, gain faster entry into the long-distance market, and the same limited regulation of their retail services that currently applies to their competitors.

LCI's petition envisions a two-part corporate structure in which the RBOC — referred to in the petition as "HoldCo" — would separate its operating businesses into two distinct subsidiary companies — a retail service company (ServeCo) and a wholesale company to manage the network (NetCo):

- ServeCo -- The RBOC's retail local and long-distance telecommunications service
 activities would be housed in ServeCo. This company would offer services on the
 same --substantially unregulated -- basis as its competitors.
- NetCo This company would offer use of all or a portion of its local network on a nondiscriminatory basis to all carriers who seek to offer local phone service, including the newly created retail side of the RBOC known as ServeCo.